

PTO/SB/82 (01-08)
Approved for use through 12/31/2008. OMB 0651-0035

See attached list

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless It displays a valid CMB control number.

Application Number Filing Date

REVOCATION OF POWER OF ATTORNEY WITH NEW POWER OF ATTORNEY AND

forms are submitted.

CHANGE OF CORRESPONDENCE ADDRESS

First Named Inventor
Art Unit
Examiner Name
Attorney Docket Number

I hereby revoke all previous powers of attorney given in the above-identified application: A Power of Attorney is submitted herewith. OR 10948 I hereby appoint the practitioners associated with the Customer Number: | V | Please change the correspondence address for the above-identified application to: The address associated with 10948 **Customer Number:** OR Firm or Individual Name Address ZIP State City Country Email Telephone I am the: Applicant/Inventor. Assignee of record of the entire interest. See 37 CFR 3.71 フ Statement under 37CFR 3.73(b) is enclosed. (Form PTO/SB/96) SIGNATURE of Applicant or Assignee of Record Signature Thomas Arria Name Telephone 81-219-8768 Date NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

This collection of Information Is required by 37 CFR 1.38. The information Is required to obtain or retain a benefit by the public which Is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Petent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Nokia Ref.	H&S Ref.	Filing Date	Application No.	Assignment Reel/Frame
I & TF. ADE				
NC52687US	800.0266.U1(US)	10/30/2009	12/598368	024739/0870
NC76407US	800.0785.U1(US)	9/27/2011	13/246246	027696/0511
NC46779US	800.0833.U1(US)	2/24/2009	12/438666	027675/0965
NC17810US	800.0870.U1(US)	6/28/2006	11/478555	018643/0540
NC47719US	800.0871.U1(US)	9/8/2006	11/517884	018274/0732
NC52605US	800.0872.U1(US)	4/24/2007	11/789267	019299/0978
NC53552US	800.0873.U1(US)	12/21/2006	11/614498	018963/0980 019229/0394
NC53989US	800.0874.U1(US)	9/13/2007	11/854985	020157/0796
NC57047US	800.0875.U1(US)	3/19/2008	12/051787	021102/0082
NC60014US	800.0876.U1(US)	5/13/2008	12/120226	021488/0823
NC62647US	800.0877.U1(US)	12/18/2007	11/958967	021184/0418 023346/0810
NC70507US	800.0878.U1(US)	11/04/209	12/613166	023753/0422
NC27385US	800.0881.U1(US)	1/4/2000	09/477457	010774/0891
NC27385US	800.0881.U2(US)	9/12/2005	11/224718	010774/0891
NC27385US	800.0881.U3(US)	2/26/2009	12/393589	010774/0891
NC33221US	800.0882.U1(US)	11/26/2002	10/304776	013719/0203
NC36695US	800.0883.U1(US)	5/26/2004	10/854532	015080/0994
NC36932US	800.0884.U1(US)	6/28/2004	10/878503	015146/0361
NC40581US	800.0885.U1(US)	8/31/2007	11/885531	020752/0281
NC42803US	800.0886.U1(US)	9/26/2007	11/791201	020810/0762
NC43371US	800.0887.U1(US)	6/21/2006	10/583789	019284/0291
NC45322US	800.0888.U1(US)	8/31/2007	11/885530	020628/0779 021153/0787
NC48411US	800.0889.U1(US)	5/28/2008	11/922372	021010/0691
NC48412US	800.0890.U1(US)	2/29/2008	11/991330	021052/0814
NC48891US	800.0891.U1(US)	7/15/2005	11/182492	016530/0576
NC49025US	800.0892.U1(US)	6/16/2005	11/154246	016521/0396
NC49423US	800.0893.U1(US)	12/27/2005	11/319026	017131/0953
NC49775US	800.0894.U1(US)	12/29/2005	11/321472	017179/0358
NC55083US	800.0896.U1(US)	4/17/2007	11/787474	019308/0364
NC61362US	800.0897.U1(US)	12/20/2007	12/004197	020479/0036
NC64176US	800.0898.U1(US)	7/3/2008	12/217501	21313/0990
NC66708US	800.0899.U1(US)	5/12/2009	12/464414	022873/0442
NC73025US	800.0900.U1(US)	7/1/2010	12/828571	024624/0062
NC16568US	800.0901.U1(US)	8/4/2003	10/634734	014872/0573
NC33132US	800.0902.U1(US)	12/24/2002	10/328858	013876/0230
NC36368US	800.0903.U1(US)	7/6/2004	10/887474	015932/0321
NC36562US	800.0904.U1(US)	9/26/2003	10/673059	015021/0891
NC37226US	800.0905.U1(US)	5/7/2009	12/085750	022651/0956
NC37394US	800.0906.U1(US)	12/4/2006	11/628634	018690/0984
NC43179US	800.0908.U1(US)	5/3/2004	10/838137	15104/0022
NC43689US	800.0909.U1(US)	3/17/2005	11/091364	016707/0469

Nokia Ref.	H&S Ref.	Filing Date	Application No.	Assignment Reel/Frame
NC43786US	800.0910.U1(US)	3/16/2004	10/802391	014888/0309
NC44962US	800.0911.U1(US)	12/22/2005	11/317914	017312/0738
NC46584US	800.0912.U1(US)	2/7/2006	11/350394	017429/0179
NC46695US	800.0913.U1(US)	5/30/2006	11/444156	018251/0311
NC46868US	800.0914.U1(US)	11/3/2006	11/592746	018915/0533
NC46869US	800.0915.U1(US)	11/3/2006	11/592747	018858/0282
NC46968US	800.0916.U1(US)	1/18/2007	11/655763	019327/0770
NC47622US	800.0917.U1(US)	3/14/2006	11/376611	017939/0734
NC47637US	800.0918.U1(US)	5/8/2006	11/431138	018145/0921
NC48088US	800.0919.U1(US)	3/7/2005	11/082633	016396/0558
NC48760US	800.0920.U1(US)	6/15/2005	11/154934	017042/0273
NC48884US	800.0921.U1(US)	11/28/2007	11/998355	016562/0918
NC51149US	800.0922.U1(US)	10/26/2006	11/588187	018613/0587
NC52808US	800.0923.U1(US)	10/25/2007	11/978155	020952/0137
NC52893US	800.0924.U1(US)	8/23/2007	11/895616	020142/0778
NC53831US	800.0925.U1(US)	8/18/2008	12/229065	021813/0805
NC54127US	800.0926.U1(US)	9/18/2007	11/901952	020248/0811
NC54295US	800.0927.U1(US)	9/21/2007	11/903402	020063/0665
NC54327US	800.0928.U1(US)	10/9/2007	11/973882	0205008/0905
NC54512US	800.0929.U1(US)	10/16/2007	11/975138	020332/0257
NC54776US	800.0930.U1(US)	5/24/2007	11/807170	019794/0008
NC55337US	800.0931.U1(US)	3/2/2009	12/227809	22334/0368
NC57291US	800.0932.U1(US)	4/27/2007	11/796620	019509/0679
NC61821US	800.0933.U1(US)	9/8/2008	12/206231	022087/0673
NC63258US	800.0934.U1(US)	8/26/2008	12/198872	021582/0805
NC63261US	800.0935.U1(US)	8/26/2008	12/198839	021582/0582
NC51923US	800.0944.U1(US)	6/14/2010	12/808168	024533/0556
NC73008US	800.0949.U1(US)	8/16/2012	12/867519	24843/0741
NC55214US	800.0950.U1(US)	9/28/2009	12/593361	023630/0802
NC35757US	846A.0035.U1(US)	9/10/2003	10/659777	014821/0686
NC35984US	846A.0036.U1(US)	11/12/2003	10/712232	014992/0126
NC36887US	846A.0037.U1(US)	12/30/2003	10/748088	015308/0309
NC44053US	846A.0038.U1(US)	1/26/2005	11/043730	017658/0616
NC44956US	846A.0039.U1(US)	10/15/2004	10/966747	015523/0298
NC49129US	846A.0040.U1(US)	7/27/2005	11/191152	016481/0357
NC51560US	846A.0041.U1(US)	8/25/2008	12/224348	022167/0443
NC49798US	848A.0006.U1(US)	12/1/2005	11/292786	017543/0313
NC45272US	868A.0104.U1(US)	3/30/2007	11/664483	020476/0990
NC35273US	879A.0152.U1(US)	1/25/2006	11/338996	013741/0536
NC65416US	879A.0153.U1(US)	12/11/2008	12/332846	022106/0654
NC71853US	879A.0154.U1(US)	12/3/2010	12/960138	025841/0009



Statement Under 37 C.F.R. 3.73(b)

Owner: Nokia Corporation

Application No.: See Attached

Nokia Corporation a corporation (Type of Assignee)

states that it is:

the assignee of the entire right, title and interest in:

the patent applications identified on the attached list by virtue of assignment(s) from the inventor(s) of the patent application(s).

The assignments were recorded in the United States Patent and Trademark Office on the Reel and Frame numbers listed on the attached list.

The undersigned is authorized to act on behalf of the assignee.

4/19/12 Date/

Thomas Arria

Title: Senior IPR Specialist

,3 6		T 5 .	A No.	Assignment
Nokia Ref.	H&S Ref.	Filing Date	Application No.	Reel/Frame
NC52687US	800.0266.U1(US)	10/30/2009	12/598368	024739/0870
NC76407US	800.0785.U1(US)	9/27/2011	13/246246	027696/0511
NC46779US	800.0833.U1(US)	2/24/2009	12/438666	027675/0965
NC17810US	800.0870.U1(US)	6/28/2006	11/478555	018643/0540
NC47719US	800.0871.U1(US)	9/8/2006	11/517884	018274/0732
NC52605US	800.0872.U1(US)	4/24/2007	11/789267	019299/0978
NC53552US	800.0873.U1(US)	12/21/2006	11/614498	018963/0980 019229/0394
NC53989US	800.0874.U1(US)	9/13/2007	11/854985	020157/0796
NC57047US	800.0875.U1(US)	3/19/2008	12/051787	021102/0082
NC60014US	800.0876.U1(US)	5/13/2008	12/120226	021488/0823
NC62647US	800.0877.U1(US)	12/18/2007	11/958967	021184/0418
NC02047U3	600.0677.01(03)	12/16/2007	11/950907	023346/0810
NC70507US	800.0878.U1(US)	11/04/209	12/613166	023753/0422
NC27385US	800.0881.U1(US)	1/4/2000	09/477457	010774/0891
NC27385US	800.0881.U2(US)	9/12/2005	11/224718	010774/0891
NC27385US	800.0881.U3(US)	2/26/2009	12/393589	010774/0891
NC33221US	800.0882.U1(US)	11/26/2002	10/304776	013719/0203
NC36695US	800.0883.U1(US)	5/26/2004	10/854532	015080/0994
NC36932US	800.0884.U1(US)	6/28/2004	10/878503	015146/0361
NC40581US	800.0885.U1(US)	8/31/2007	11/885531	020752/0281
NC42803US	800.0886.U1(US)	9/26/2007	11/791201	020810/0762
NC43371US	800.0887.U1(US)	6/21/2006	10/583789	019284/0291
NC45322US	800.0888.U1(US)	8/31/2007	11/885530	020628/0779 021153/0787
NC48411US	800.0889.U1(US)	5/28/2008	11/922372	021010/0691
NC48412US	800.0890.U1(US)	2/29/2008	11/991330	021052/0814
NC48891US	800.0891.U1(US)	7/15/2005	11/182492	016530/0576
NC49025US	800.0892.U1(US)	6/16/2005	11/154246	016521/0396
NC49423US	800.0893.U1(US)	12/27/2005	11/319026	017131/0953
NC49775US	800.0894.U1(US)	12/29/2005	11/321472	017179/0358
NC55083US	800.0896.U1(US)	4/17/2007	11/787474	019308/0364
NC61362US	800.0897.U1(US)	12/20/2007	12/004197	020479/0036
NC64176US	800.0898.U1(US)	7/3/2008	12/217501	21313/0990
NC66708US	800.0899.U1(US)	5/12/2009	12/464414	022873/0442
NC73025US	800.0900.U1(US)	7/1/2010	12/828571	024624/0062
NC16568US	800.0901.U1(US)	8/4/2003	10/634734	014872/0573
NC33132US	800.0902.U1(US)	12/24/2002	10/328858	013876/0230
NC36368US	800.0903.U1(US)	7/6/2004	10/887474	015932/0321
NC36562US	800.0904.U1(US)	9/26/2003	10/673059	015021/0891
NC37226US	800.0905.U1(US)	5/7/2009	12/085750	022651/0956
NC37394US	800.0906.U1(US)	12/4/2006	11/628634	018690/0984
NC43179US	800.0908.U1(US)	5/3/2004	10/838137	15104/0022
NC43689US	800.0909.U1(US)	3/17/2005	11/091364	016707/0469

Nokia Ref.	H&S Ref.	Filing Date	Application No.	Assignment Reel/Frame
NC43786US	800.0910.U1(US)	3/16/2004	10/802391	014888/0309
NC44962US	800.0911.U1(US)	12/22/2005	11/317914	017312/0738
NC46584US	800.0912.U1(US)	2/7/2006	11/350394	017429/0179
NC46695US	800.0913.U1(US)	5/30/2006	11/444156	018251/0311
NC46868US	800.0914.U1(US)	11/3/2006	11/592746	018915/0533
NC46869US	800.0915.U1(US)	11/3/2006	11/592747	018858/0282
NC46968US	800.0916.U1(US)	1/18/2007	11/655763	019327/0770
NC47622US	800.0917.U1(US)	3/14/2006	11/376611	017939/0734
NC47637US	800.0918.U1(US)	5/8/2006	11/431138	018145/0921
NC48088US	800.0919.U1(US)	3/7/2005	11/082633	016396/0558
NC48760US	800.0920.U1(US)	6/15/2005	11/154934	017042/0273
NC48884US	800.0921.U1(US)	11/28/2007	11/998355	016562/0918
NC51149US	800.0922.U1(US)	10/26/2006	11/588187	018613/0587
NC52808US	800.0923.U1(US)	10/25/2007	11/978155	020952/0137
NC52893US	800.0924.U1(US)	8/23/2007	11/895616	020142/0778
NC53831US	800.0925.U1(US)	8/18/2008	12/229065	021813/0805
NC54127US	800.0926.U1(US)	9/18/2007	11/901952	020248/0811
NC54295US	800.0927.U1(US)	9/21/2007	11/903402	020063/0665
NC54327US	800.0928.U1(US)	10/9/2007	11/973882	0205008/0905
NC54512US	800.0929.U1(US)	10/16/2007	11/975138	020332/0257
NC54776US	800.0930.U1(US)	5/24/2007	11/807170	019794/0008
NC55337US	800.0931.U1(US)	3/2/2009	12/227809	22334/0368
NC57291US	800.0932.U1(US)	4/27/2007	11/796620	019509/0679
NC61821US	800.0933.U1(US)	9/8/2008	12/206231	022087/0673
NC63258US	800.0934.U1(US)	8/26/2008	12/198872	021582/0805
NC63261US	800.0935.U1(US)	8/26/2008	12/198839	021582/0582
NC51923US	800.0944.U1(US)	6/14/2010	12/808168	024533/0556
NC73008US	800.0949.U1(US)	8/16/2012	12/867519	24843/0741
NC55214US	800.0950.U1(US)	9/28/2009	12/593361	023630/0802
NC35757US	846A.0035.U1(US)	9/10/2003	10/659777	014821/0686
NC35984US	846A.0036.U1(US)	11/12/2003	10/712232	014992/0126
NC36887US	846A.0037.U1(US)	12/30/2003	10/748088	015308/0309
NC44053US	846A.0038.U1(US)	1/26/2005	11/043730	017658/0616
NC44956US	846A.0039.U1(US)	10/15/2004	10/966747	015523/0298
NC49129US	846A.0040.U1(US)	7/27/2005	11/191152	016481/0357
NC51560US	846A.0041.U1(US)	8/25/2008	12/224348	022167/0443
NC49798US	848A.0006.U1(US)	12/1/2005	11/292786	017543/0313
NC45272US	868A.0104.U1(US)	3/30/2007	11/664483	020476/0990
NC35273US	879A.0152.U1(US)	1/25/2006	11/338996	013741/0536
NC65416US	879A.0153.U1(US)	12/11/2008	12/332846	022106/0654
NC71853US	879A.0154.U1(US)	12/3/2010	12/960138	025841/0009



Nokia Corporation P.0.86× 2.26.

(el. +358 7180 08000

Fax +358 7180 38226

Submess Identity Code 6112038-9, Hebbert

FL00045, NOMA SPOUR Finland

(cenarah denne 4, 02156 ESPCO)

LIMITED POWER OF ATTORNEY

that we, the undersigned, under the authority granted to each of us to sign jointly on behalf of

NOKIA CORPORATION Keilalahdentie 4 02150 Espoo Finland

hereby authorize the following person

Thomas Arria Nokia Corporation 5 Wayside Road 01803 Burlington U.S.A.

in his capacity as Senior IP Specialist, Patenting, to sign alone in the name of Nokia Corporation all the documents that relate to the filing, prosecution and registration of patent applications, as well as post-grant operations relating to patents granted based on such patent applications. Such documents may include without limitation case-specific Powers of Attorney, Assignment Deeds for assigning the ownership of an invention to Nokia, Novelty Declarations and Inventorship Declarations.

The rights granted under this Power of Attorney may not be transferred further, other than as specified above.

The authority granted by this Power of Attorney shall expire six (6) months from the date of execution.

Notwithstanding the foregoing, the authority granted by this Power of Attorney shall expire when the authorized person's employment with Nokia ends.

This Power of Attorney is duly signed on this day of January 1, 2012.

NOKIA CORPORATION

Ву:

Name: Harri Honkasalo

Title: Director,

Legal and Intellectual Property

Ву:

Name: Paul Melin Title: Vice President,

Legal and Intellectual Property